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## ABSTRACT

In a demonstration of the Appalachia Educational Laboratory's (AEL's) Community Partnership for School Improvement model, Hart County (Kentucky) community members and school representatives planned and implemented a school improvement project to increase parents' involvement in their children's education. In May 1988, 203 out of 625 questionnaires were completed by randomly selected parents of children in Hart County's six schools. The 30-item questionnaire measured aspects of parent involvement: meeting basic needs, activities at home and school, communications, and involvement in school decision making. Project activities during the 1988-89 school year included a 1-day workshop on parent involvement attended by school staff, 6 school-wide plans, 37 teacher projects aimed at increasing parent involvement, and acquisition of videotapes on parenting for use with parents. A second administration of the questionnaire, completed by 209 of the 625 randomly selected parents at the end of the school year, showed a significant overall increase in parent involvement. The greatest improvement concerned communications by teachers and principals with parents, and involvement by principals of parents in decision making. Scores did not improve in the area of schools helping parents meet their children's basic needs. Although no individual school showed a significant improvement in average total score, 68% of the observed differences in items were in the positive direction. AEL gives three recommendations for building on the success of the 1988-89 project. This report includes nine statistical tables. Appendices contain the instrument used in this study and a revised version for future use. (SV)

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Hart County Parent Involvement Project  
Report of Pre- and Post-test  
with AEL's Level of Parent Involvement Questionnaire

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Prepared for Staff of  
the Hart County Schools

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## Executive Summary

The Community Partnership for School Improvement identified the need to improve the level of parent involvement as the focus of a school improvement project. The Partnership developed a four-part plan to address the need, and Hart County teachers and administrators implemented the plan during the 1988-1989 school year.

The plan included the development of a valid and reliable instrument to measure possible changes in the level of parent involvement. The instrument was administered twice, each time to a randomly selected sample of Hart County parents, once before the improvement project began, and once at the end of the 1988-1989 school year.

Analysis of data gathered in both administrations showed that the level of parent involvement improved significantly during the 1988-1989 school year. The analysis also suggests that the greatest improvement concerned communications (by teachers and principals) with parents and to the involvement (by principals) of parents in decisionmaking. Finally, the data suggest that improvement in the level of parent involvement did not include helping parents meet their children's basic needs--one of the five aspects of parent involvement identified by Epstein (1987).

Recommendations include (1) continuation of the Community Partnership for School Improvement in the coming year, (2) continued work in improving the level of parent involvement in the coming year, and (3) consideration of developing a project to help parents meet their children's basic needs, perhaps in collaboration with another community agency.

Appendix A contains the instrument used in this study. Appendix B contains an improved version of the instrument, for possible use by Hart County staff in the future.

Hart County Parent Involvement Project  
Report of Pre- and Post-test  
with AEL's Level of Parent Involvement Questionnaire

Introduction

With the cooperation of the Hart County (KY) Board of Education and staff of the Hart County Schools, AEL's Rural, Small Schools program conducted a demonstration of AEL's Community Partnership for School Improvement model from November 1988 through May 1989.

Briefly, the Partnership brought community members and school representatives together to plan a school improvement project. Overall, the demonstration took place to show how such a group might cooperate to plan projects for school or community improvement.

Similar demonstrations took place in small, poor, rural school districts in AEL's three other states (Tennessee, Virginia, and West Virginia). Thanks to the cooperation of people in each of these districts, AEL is developing the procedures and features of the model further, based on experience in all four demonstration sites.

During the initial work in each site, the focus of the Partnership's work was on identifying an educational need, developing a plan to address the need, and carrying out a school improvement project.

In Hart County, the Partnership identified the need to increase the level of parents' involvement in the education of their own children. During a series of meetings, members of the Partnership developed a four-part plan.

The plan called for (1) using a valid and reliable instrument to measure changes in the level of parent involvement, (2) conducting a county-wide workshop about parent involvement, (3) sponsoring building-level improvement projects, and (4) sponsoring improvement projects designed by individual teachers.

### Review of Improvement Project

Before activities began, those involved in the project researched the availability of instruments that might be capable of measuring changes in the level of parent involvement. A literature search of the ERIC database revealed no such previously existing instruments. Hence, AEL staff, together with members of the Partnership, developed an instrument.

The questions that appeared on the instrument were based on Epstein's (1987) research into the construct of parent involvement, which identifies five aspects of parent involvement: meeting basic needs, activities at school, activities at home, communications, and involvement in school decisionmaking. Approximately half the questions were adapted from the Parent Attitudes Toward School Effectiveness (PATSE) questionnaire developed by Gable, Murphy, Hall, and Clark (1986). These items were selected in part because they reflected Epstein's notions and, in part, because Gable and colleagues reported adequate reliabilities for each item adapted for the questionnaire. The remaining questions were developed by AEL staff and Partnership members. Some items were negatively worded, and scores for these items were reversed for the purposes of data analysis, so that analyzed scores could be combined into a meaningful total score.

The instrument was administered to a random sample of parents as a pre-test in May 1988. Two hundred three (203) usable protocols (from approximately 625 distributed) were returned to the school and analyzed by AEL. Factor analysis indicated that items loaded on a single factor (i.e., parent involvement). Moreover, the alpha reliability of the instrument obtained from this administration was .95.

The workshop on parent involvement, titled Forging New Connections, was held on October 10, 1988. It featured 7 concurrent sessions delivered by practitioners and a keynote speech delivered by a nationally-known leader in parent involvement. Most participants were staff of the Hart County Schools, and the workshop was held on a regularly-scheduled in-service day.

During the workshop school committees were established for the purpose of developing school plans to increase the level of parent involvement. Teams were informed that small grants (up to \$200 for each school) would be available on written application. Teachers also learned that they would be eligible for modest grants (up to \$50) to support an activity targeted at increasing the level of parent involvement.

Application forms were provided to teachers during the workshop. Application for both types of grants (for school committees and for individual teachers) was kept simple. The forms asked only for a description of the proposed project and a budget. AEL staff reviewed the applications subsequently received. Six school projects and 37 teacher projects were funded.

In addition, to follow-up on one of the workshop sessions, each elementary school received copies of five videotapes from a popular series on parenting (Footsteps: A Television Series on Parenting, 1977), together with ample copies of viewer guides for use with parents. It was intended that the tapes would be loaned to parents by each elementary school.

Projects funded under the small-grant program were carried out by staff of the Hart County schools during the 1988-1989 academic year, and in May, 1989, the Level of Parent Involvement Questionnaire (see Appendix A) was administered to a separately-selected random sample of parents (that is, the pre- and post-test samples were independent). This time, 209 usable returns (from approximately 625) were available for analysis.

#### Pre- and Post-Test Results

The goal of the project was to increase the overall level of parent involvement in the Hart County Schools. The major test of significance, then, focused on changes in the average total score, which was computed by summing all items on each protocol and computing the mean of those sums.

Following the post-test, means and standard deviations for each item also were computed for the total sample and for each school. These data--including data on total score--are presented in Tables 1-7, which follow.



TABLE 1

TOTAL SAMPLE

N = 209 (post)

N = 203 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
1	3.97	1.05	3.99	.99
2	3.31	1.19	3.15	1.16
3	3.85	.95	3.76	.95
4	4.14	.77	4.00	.76
5	3.49	1.19	3.24	1.26
6	3.67	1.22	3.73	1.17
7	3.43	1.13	3.27	1.15
8	3.88	1.18	3.75	1.10
9	3.47	.98	3.29	1.01
10	2.76	.88	2.70	.99
11	3.26	1.07	3.11	1.05
12	3.30	1.21	3.18	1.18
13	3.67	1.10	3.44	1.10
14	3.86	1.03	3.72	1.03
15	3.87	.92	3.70	.90
16	3.42	.96	3.39	.87
17	3.25	1.06	3.27	1.01
18	3.82	.92	3.66	.94
19	3.98	.78	3.86	.85
20	3.85	1.12	3.73	1.15
21	3.21	1.05	3.10	.96
22	3.77	.78	3.67	.85
23	3.15	1.02	2.87	1.06
24	3.89	1.15	3.79	1.10
25	3.82	1.00	3.69	1.00
26	3.58	.82	3.53	.77
27	3.10	.92	.78	.87
28	3.77	.87	3.70	.85
29	3.66	.93	3.46	.99
30	4.03	1.12	3.91	1.05
TOTAL	108.22	18.53	104.42	17.25

TABLE 2

BONNIEVILLE

N = 37 (post)

N = 41 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
ITEM1	4.05	1.03	4.27	.81
ITEM2	3.30	1.22	2.98	1.06
ITEM3	3.95	.91	3.78	1.13
ITEM4	4.24	.68	4.15	.69
ITEM5	3.76	1.09	3.34	1.26
ITEM6	3.41	1.19	3.51	1.19
ITEM7	3.35	1.11	3.34	1.11
ITEM8	3.73	1.33	3.59	1.26
ITEM9	3.49	1.10	3.20	1.03
ITEM10	2.81	1.08	2.66	1.09
ITEM11	3.22	1.06	3.05	1.05
ITEM12	3.38	1.16	3.15	1.13
ITEM13	3.51	1.04	3.44	1.05
ITEM14	3.59	1.21	3.80	1.05
ITEM15	3.89	.81	3.71	.93
ITEM16	3.14	.86	3.17	.92
ITEM17	3.30	.94	3.29	1.03
ITEM18	3.81	.78	3.54	.95
ITEM19	4.03	.64	4.07	.82
ITEM20	3.36	1.03	3.56	1.29
ITEM21	3.27	1.07	2.95	1.12
ITEM22	3.73	.73	3.68	.90
ITEM23	2.76	.95	2.78	1.15
ITEM24	3.95	1.13	3.61	1.22
ITEM25	3.62	1.04	3.73	1.05
ITEM26	3.27	.65	3.29	.81
ITEM27	2.84	.90	2.56	.95
ITEM28	3.65	.72	3.71	.87
ITEM29	3.41	.98	3.34	1.17
ITEM30	4.27	.87	4.05	1.00
TOTAL	106.57	15.96	103.29	15.67

TABLE 3

CUB RUN

N = 23 (post)

N = 21 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
ITEM1	4.35	.57	4.24	.77
ITEM2	3.39	1.27	3.62	1.02
ITEM3	4.13	.69	3.67	1.02
ITEM4	4.35	.65	4.14	.57
ITEM5	3.70	1.29	3.57	.98
ITEM6	3.87	1.06	3.90	1.09
ITEM7	3.65	1.11	3.57	.93
ITEM8	4.13	.97	4.05	.86
ITEM9	3.91	.73	3.86	.36
ITEM10	2.78	1.17	2.67	.66
ITEM11	3.61	1.03	3.24	.89
ITEM12	3.74	1.21	3.43	.98
ITEM13	3.65	1.15	3.62	.74
ITEM14	4.09	.85	3.76	1.00
ITEM15	4.26	.92	3.71	.78
ITEM16	3.65	.83	3.43	.81
ITEM17	3.57	1.08	3.62	.80
ITEM18	3.96	.88	3.52	1.03
ITEM19	4.30	.76	4.05	.80
ITEM20	3.91	1.31	3.86	.91
ITEM21	3.43	1.16	3.19	.81
ITEM22	3.87	.87	3.81	.51
ITEM23	3.57	1.08	2.95	1.02
ITEM24	3.83	1.34	3.76	1.04
ITEM25	4.09	.85	3.62	1.12
ITEM26	3.65	.78	3.67	.66
ITEM27	3.30	.97	2.71	.85
ITEM28	3.96	.77	3.57	.81
ITEM29	3.96	.88	3.33	1.02
ITEM30	4.09	1.12	4.05	.55
TOTAL	114.74	19.97	108.19	12.31

TABLE 4

HART COUNTY HIGH SCHOOL

N = 31 (post)

N = 31 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
ITEM1	3.16	1.44	3.06	1.34
ITEM2	2.55	1.18	2.48	1.09
ITEM3	3.06	1.12	3.55	.89
ITEM4	3.97	.98	3.68	1.05
ITEM5	2.81	1.38	2.45	1.21
ITEM6	3.29	1.53	3.35	1.33
ITEM7	2.61	1.17	2.23	.99
ITEM8	3.35	1.43	3.23	1.15
ITEM9	3.03	1.05	2.68	1.08
ITEM10	2.74	.96	2.55	1.18
ITEM11	2.74	1.12	2.68	1.08
ITEM12	2.52	1.39	2.52	1.12
ITEM13	3.13	1.41	2.84	1.04
ITEM14	3.26	1.24	3.00	1.18
ITEM15	3.45	1.15	3.42	1.06
ITEM16	3.10	1.08	3.19	.97
ITEM17	2.90	1.19	3.06	1.06
ITEM18	3.48	1.21	3.42	1.06
ITEM19	3.45	1.09	3.42	.96
ITEM20	3.32	1.40	3.20	1.27
ITEM21	2.74	1.24	2.58	.96
ITEM22	3.81	.91	3.48	.93
ITEM23	2.74	1.03	2.61	.88
ITEM24	3.23	1.23	3.16	1.21
ITEM25	3.35	1.08	3.42	1.03
ITEM26	3.48	1.00	3.52	.72
ITEM27	2.77	1.06	2.48	.85
ITEM28	3.58	1.15	3.55	.85
ITEM29	3.19	1.05	3.03	1.11
ITEM30	2.71	1.49	2.71	1.32
TOTAL	93.55	21.83	90.65	19.33

TABLE 5

LEGRANDE

N = 26 (post)

N = 21 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
ITEM1	4.19	.63	4.19	.51
ITEM2	3.46	.95	3.71	1.01
ITEM3	3.96	.82	4.00	.77
ITEM4	4.12	.65	3.95	.74
ITEM5	3.69	.97	3.57	1.25
ITEM6	3.85	.97	3.95	1.12
ITEM7	3.73	.87	3.71	1.01
ITEM8	3.85	.97	3.95	.86
ITEM9	3.62	.70	3.48	.93
ITEM10	2.88	.650	3.19	.98
ITEM11	3.73	.721	3.52	.87
ITEM12	3.50	.992	3.76	.89
ITEM13	3.77	.713	2.67	1.11
ITEM14	3.96	.664	4.05	.38
ITEM15	4.04	.535	3.81	.60
ITEM16	3.42	.906	3.67	.86
ITEM17	3.46	.997	3.38	.86
ITEM18	3.88	.828	4.00	.63
ITEM19	4.08	.639	3.86	.48
ITEM20	3.92	.840	4.10	.89
ITEM21	3.42	.811	3.33	.80
ITEM22	3.65	.942	3.67	.80
ITEM23	3.31	.843	3.38	1.02
ITEM24	3.81	.904	3.90	1.09
ITEM25	3.69	.885	3.90	1.04
ITEM26	3.50	.656	3.67	.80
ITEM27	3.31	.747	3.14	.73
ITEM28	3.73	.928	4.00	.77
ITEM29	3.88	.659	4.05	.50
ITEM30	4.38	.500	4.33	.58
TOTAL	111.81	13.84	111.90	13.01

TABLE 6

MEMORIAL

N = 43 (post)

N = 42 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
ITEM1	4.02	.94	4.02	.95
ITEM2	3.44	1.10	3.14	1.16
ITEM3	4.00	.93	3.83	.82
ITEM4	3.98	.89	3.88	.74
ITEM5	3.47	1.10	3.10	1.27
ITEM6	3.74	1.16	3.76	1.12
ITEM7	3.58	1.14	3.24	1.14
ITEM8	3.95	1.13	3.90	1.05
ITEM9	3.53	1.16	3.38	1.03
ITEM10	2.70	.640	2.93	.95
ITEM11	3.16	1.131	3.17	1.08
ITEM12	3.14	1.232	3.36	1.16
ITEM13	3.72	1.053	3.48	1.11
ITEM14	4.05	1.024	3.81	.99
ITEM15	3.81	1.075	3.60	.94
ITEM16	3.35	.926	3.52	.80
ITEM17	3.12	1.187	3.12	.89
ITEM18	3.84	1.048	3.64	.93
ITEM19	4.14	.749	3.76	.82
ITEM20	3.84	1.070	3.83	1.10
ITEM21	3.16	.971	3.24	.82
ITEM22	3.65	.812	3.64	1.01
ITEM23	3.26	1.033	3.10	1.08
ITEM24	4.12	.984	4.14	.84
ITEM25	4.14	.865	3.64	.93
ITEM26	3.51	.916	3.43	.77
ITEM27	3.07	.807	3.02	.87
ITEM28	3.86	.808	3.86	.84
ITEM29	3.70	.869	3.60	.77
ITEM30	4.26	.880	4.00	.91
TOTAL	109.30	17.29	106.14	14.23

TABLE 7

MUNFOREVILLE

N = 48 (post)

N = 47 (pre)

Item	POST		PRE	
	Mean	Std Dev	Mean	Std Dev.
ITEM1	4.0	1.03	4.11	.81
ITEM2	3.54	1.18	3.28	1.23
ITEM3	3.92	.85	3.77	.96
ITEM4	4.21	.65	4.13	.61
ITEM5	3.54	1.15	3.51	1.21
ITEM6	3.83	1.23	3.96	1.10
ITEM7	3.58	1.03	3.60	1.08
ITEM8	4.15	1.07	3.87	1.08
ITEM9	3.42	.79	3.34	1.01
ITEM10	2.73	.840	2.45	.83
ITEM11	3.27	1.031	3.17	1.09
ITEM12	3.56	1.032	3.11	1.29
ITEM13	4.06	.983	4.06	.94
ITEM14	4.13	.794	3.89	.96
ITEM15	3.87	.765	3.89	.87
ITEM16	3.79	.976	3.47	.86
ITEM17	3.29	.977	3.32	1.16
ITEM18	3.92	.748	3.83	.89
ITEM19	3.92	.619	3.98	.87
ITEM20	4.10	.990	3.85	1.12
ITEM21	3.29	.991	3.32	.93
ITEM22	3.87	.492	3.72	.68
ITEM23	3.33	.973	2.66	1.03
ITEM24	4.15	1.154	3.96	.98
ITEM25	3.98	1.025	3.79	.91
ITEM26	3.92	.746	3.70	.78
ITEM27	3.29	.947	2.83	.79
ITEM28	3.79	.858	3.57	.88
ITEM29	3.83	.889	3.53	.95
ITEM30	4.27	.890	4.26	.79
TOTAL	112.65	16.30	107.91	18.80

### Analysis of Results

A one-way analysis of variance (ANOVA) was computed to determine which items (and total scores) to compare for possibly significant differences in means from pre-test to post-test ( $p < .05$ ). The critical comparison, of course, was the comparison of average total score for the entire sample, from pre- to post-test.

For the total sample, the one-way ANOVA revealed possibly significant differences for the following items: 5, 13, 23, 27, 29, and total score. Within each school, where sample sizes were much smaller, there were fewer significant differences, and two schools (Bonnieville and Hart County High Schools) showed no statistically significant differences on any item. No differences in total scores were significant at the school level.

At the same time, readers need to understand that in all schools 68% of the observed differences in items (whether statistically significant or not) were, in fact, in the anticipated (positive) direction. Among the five schools with observed positive changes in total score, 74% of items showed positive changes.

The following schools, however, showed possible statistically significant differences on the following items: Cub Run--items 15, 27, 29; LeGrande--item 13; Memorial--items 19 and 25; Munfordville--items 23 and 27.

All items suggested by the ANOVA as possible significant differences from pre- to post-test were tested for significance with the t-test for independent samples (two-tailed test of significance, pooled variance estimate, for a conservative estimate of significance). All such comparisons were, in fact, significant at  $p < .05$ ). Table 8 presents the t-test results.



TABLE 8

<u>total sample</u>		
item	t-value	probability of t
item 5	2.09	.037
item 13	2.18	.030
item 23	2.75	.006
item 27	3.54	.000
item 29	2.09	.038
total score	2.16	.032
<u>Cub Run</u>		
item 15	2.12	.040
item 27	2.14	.038
<u>LeGrande</u>		
item 13	4.13	.000
<u>Memorial</u>		
item 19	2.23	.029
item 25	2.55	.013
<u>Munfordville</u>		
item 23	3.28	.001
item 27	2.58	.011

### Interpretation

The data reveal significant improvement in the level of parent involvement in Hart County during the 1988-1989 school year. The observed (and statistically significant) change in total score is equivalent to an effect size of .21.

To understand this degree of change in practical terms, one might compare the change in the number of respondents with total scores greater than 120 (indicating an average agreement with every statement, with ratings of negatively-worded items reversed) on pre- and post-tests. On the pre-test, 39 respondents had total scores above 120; on the post-test, 52 respondents had total scores above 120.

At the lower end, one might compare the change in the number of respondents with total scores less than 90 (indicating an average "not sure" response). On the pre-test, 41 respondents had total scores below 90, and on the post-test 30 had scores below 90.

Both these comparisons indicate the degree to which the project might have affected individual parents.

Still lower, however, one might compare the number of respondents whose total scores indicated average disagreement with every item (that is, for example, total scores below 80). On both the pre- and post-test 16 respondents had total scores this low. This fact suggests that there may be a group of parents to whom the school system has not yet been able to demonstrate its concern for the involvement of parents. This fact will be discussed further under the heading "possible needs," in the Discussion section.

Total sample. Among the total sample, 27 of 30 items (see Appendix A) and the total score were observed to have changed in the positive direction from pre-test to post-test. Of these, five items and the total score were statistically significant. This is strong evidence that the school improvement project designed and implemented by the Partnership was successful.

Although sample sizes in each school were too small to confirm many of the observed positive differences as statistically significant, it is likely that larger sample sizes would have allowed these differences to emerge as significant.

At Bonnieville, observed differences among 21 items and the total were in the positive direction, though none could be confirmed as statistically different.

At Cub Run, observed differences among 26 items and the total score were in the positive direction, though only two items could be confirmed as statistically different.

At Hart County High School, observed differences among 22 items and the total score were in the positive direction, even though none could be confirmed as statistically different.

At LeGrande, however, only 11 items--and not the total score--were observed to be in the positive direction, whereas one item (item 13) did prove to be significantly different from pre- to post-test. Readers should recall that among all schools, LeGrande had the highest observed level of parent involvement on the pre-test. According to post-test results LeGrande now has the third highest observed level of parent involvement.

At Memorial, observed differences among 20 items and the total score were in the positive direction, and two were confirmed as significantly different.

At Munfordville, observed differences among 22 items and the total score were in the positive direction, and two were confirmed as statistically different.

Table 9 reports the observed positive (as well as zero or negative) pre- to post-test differences. Those in parentheses are statistically significant.

TABLE 9

Observed Differences, Each Item  
By Total Sample and School

Item	T	B	C	H	L	Mem	Mun
1	-	-	+	+	-	-	-
2	+	+	+	-	+	+	-
3	+	+	+	-	-	+	+
4	+	+	+	+	+	+	+
5	(+)	+	+	+	+	+	+
6	-	-	-	-	-	-	-
7	+	+	+	+	-	+	-
8	+	+	+	+	+	+	+
9	+	+	+	+	+	+	+
10	+	+	+	+	-	-	+
11	+	+	+	+	-	+	-
12	+	+	-	-	-	+	-
13	(+)	+	+	+	(+)	+	-
14	+	+	+	-	+	+	-
15	+	(+)	+	+	+	-	-
16	+	+	-	-	-	+	-
17	-	+	-	-	+	-	-
18	+	+	+	-	+	+	-
19	+	-	+	+	+	(+)	-
20	+	+	+	+	-	+	+
21	+	+	+	+	-	-	-
22	+	+	+	-	+	+	-
23	(+)	-	+	+	-	+	(+)
24	+	+	+	-	-	+	-
25	+	+	-	-	(+)	+	-
26	+	-	-	-	+	+	-
27	(+)	+	(+)	+	+	+	(+)
28	+	+	+	-	-	+	-
29	+	+	+	-	+	+	-
30	+	+	-	-	+	+	-

+ = observed positive difference, pre- to post-test  
 - = no difference or negative difference, pre- to post-test  
 () = statistically significant difference ( $p < .05$ )

T = total sample  
 B = Bonnieville  
 C = Cub Run  
 H = Hart County High School  
 L = LeGrande  
 Mem = Memorial  
 Mun = Munfordville

## Discussion

The evidence of pre- and post-test comparison strongly suggests that the parents' perceived level of involvement with the schools improved in Hart County during the 1988-1989 school year. Although it can be inferred that the source of the improvement lies in the activities designed by the Partnership and carried out by school staff, this analysis confirms only that improvement did take place. As with most statistical work, causality remains only an inference. See Appendix A for the text of each item.

Observed differences in each school on most items were positive, a fact that suggests the overall improvement has its roots at the building level. It is interesting that LeGrande, which recorded the highest observed level of parent involvement on the pre-test, did not record a higher observed post-test than pre-test total score, unlike the other schools. Readers, however, must remember not only that pre- to post-test changes are not statistically significant at the building level, but also that differences between schools on total scores are not significantly significant. Lack of observed change at LeGrande--in spite of considerable effort by principal and the school committee to improve parent involvement--could also be an artifact of two statistical tendencies that may be operating here: ceiling effect (high scores cannot in fact go much higher) and regression toward the mean.

Possible strengths. A number of items--13, 23, 27, and 29--proved to be statistically significant in the analysis of the total sample as well as at the building level. All these items were judged--in the development of the questionnaire--as pertaining to communications (13 and 29) or decisionmaking (23 and 27). Three of these 4 items (23, 27, and 29) also refer explicitly to the principal's role with parents. In addition, these three items also discriminated strongly between parents with low total scores and parents with high total scores (that is, between parents with low and high levels of perceived parent involvement).

These results are in agreement with a qualitative report by the staff member responsible for funding and monitoring AEL minigrants in Hart County,

based on a May 15, 1989 visit. She reported, "there was one theme--clearly encouraged by the central office--that emerged from all the minigrants: communication." She noted that every principal she visited had mentioned not only increased direct communications with parents but also considerable success at having local newspapers cover school events. The superintendent stressed during the same visit that more important than the specific projects at each school, he felt the school system had communicated to parents its interest in having parents involved in their children's education and that the overall project had made school system staff more aware of the importance of parent involvement.

Both the survey data and the observational data suggest the usefulness of improving communications with parents and involving them in decisionmaking as a means to improve parent involvement. This observation is further supported by the observation that the other items for which statistically significant differences from pre- to post-test were recorded were judged--in the initial development of the instrument--to pertain either to communications (5, 15, and 19, all of which referenced the role of teachers) or decisionmaking (25, which again referenced the role of the principal).

Possible needs. Although not based on statistically significant differences, Table 9 shows that some items showed little or no positive change from pre- to post-test. Items for which positive differences were recorded in fewer than four schools were item 1 ("Teachers in this school use either phone calls, newsletters, regular notes... to communicate my child's progress to me"); item 6 ("The school staff do not send parents booklets or pamphlets on school information, discipline, nutrition, or health care"); item 16 ("The school staff help parents to be aware of family services that are available from other agencies..."); item 17 ("It is difficult for parents to contribute to decisions made at this school"); and item 26 ("Parents who need help in feeding and clothing their children can get help or useful information from the school").

Two of these items (1 and 17) pertain to communications and decisionmaking, and may be good targets for improvement in the coming year, especially in light of the positive results obtained on related items for which statistically significant results were reported above (namely, items 5, 13, 15, 19, 23, 25, and 27).

The other items for which positive results were not observed (6, 16, and 26) all pertain to helping parents meet the basic needs of their children. This outcome is not surprising, since schools rarely address such needs aggressively and directly. School lunch and breakfast programs are, of course, a notable exception, but these programs have been so well institutionalized in American schools that parents are likely to take them for granted.

The fact that a small minority of parents in both the pre- and post-test continue to give very low ratings (for example, total scores below 80), may relate to the lack of improvement in the aspect of parent involvement pertaining to helping parents meet their children's basic needs. The AEL staff member responsible for arranging and monitoring the projects conducted by teachers reports that most of the special education teachers she interviewed were disappointed with the results of their projects. The level of parent participation in the projects developed by these teachers was not what they had hoped for. The superintendent also expressed concern that, in spite of all the efforts the schools had made this year, it is very hard to reach the parents of special education students, no matter how hard one tries. He pointed out that most of the children in special education have parents who were miserable in school, experienced failure there, dropped out, and are passing their dislike of school on to their children.

Meeting children's basic needs may be a critical concern of these parents, and assistance from the schools in this area may be a way of involving parents who cannot be involved by more traditional means. Further, it may be that the involvement of these parents in their children's learning cannot be encouraged unless their children's basic needs are better met. It

is possible that the school can play some role in helping these parents, particularly in cooperation with another community agency or organization. If the school were to play such a role, these parents might become convinced of the school's concern for their children.

Support for this assertion can be found in the relation of the items pertaining to basic needs (6, 16, and 26) to other items. The following items are moderately related (correlation between .37 and .45) to the basic needs items (recall that negatively-worded items are reversed when scored): item 8 ("Parents are not encouraged to visit their children's classroom or schools"), item 12 ("The teachers or principal inform parents about what students need in order to study effectively at home"), item 15 ("In general, the staff is frank and open with parents and students"), item 18 ("Parents are aware that teachers are willing to help their children with specific needs or concerns"), and item 20 ("Teachers do not encourage parents to help their children make the most of their years in school"). The moderate correlations with these items indicate that those who rate items 6, 16, and 26 low tend to rate items 8, 12, 15, 18, and 20 low as well. Perhaps these latter items point to a lack of trust between such parents and the school.

### Recommendations

Purposeful improvement in the level of parent involvement in the Hart County Schools has made an excellent start, based on the cooperation of school staff and community members. AEL understands that additional activities--including publication of a newsletter--are being planned for the 1989-1990 school year. AEL staff commend Hart County educators and community members--especially members of the Partnership--for their dedication to this project. Although there have been frustrations and although improving the level of parent involvement is steady work, still the results of this project are heartening. AEL staff would like to propose several recommendations for building on the success of the 1988-1989 project, as follows:



Recommendation 1. The success of this project indicates to AEL the worthiness of continuing to operate the Community Partnership for School Improvement. AEL recommends that the Partnership continue in the coming year, perhaps to undertake another school improvement project, perhaps to assist with an additional project to improve parent involvement, or perhaps to undertake a community improvement project. AEL is currently making plans to bring the Steering Committees of the original demonstration sites (including Hart County) together for an update and to present possibilities for further action. While these plans have not yet been finalized, staff hope that the Hart County Partnership will be able to participate.

Recommendation 2. Whatever the Partnership may eventually become, however, AEL staff recommend yearly followups with the Level of Parent Involvement questionnaire. Following the pre-test in May 1988, AEL staff revised several items and produced a revised instrument, which retains 30 items. If another survey is undertaken in May 1990, AEL recommends use of the revised instrument. (See Appendix B). Comparisons with 1989 results could be made with items that are the same on each instrument, and at the same time new base-line data could be generated by the revised instrument. A Virginia district is presently piloting the revised instrument.

Recommendation 3. If the Partnership or the school system considers an additional project to improve the level of parent involvement, AEL recommends that those involved seriously consider measures to help parents meet their children's basic needs. The analysis presented here suggests that some parents may need such assistance, and that these parents may be among those whom the school system has previously had difficulty involving in its work. Perhaps such a project could be conducted in collaboration with one or more community agencies or

organizations. Such a project would be a natural undertaking for members of the Partnership, on which both school staff and community members are represented.

## PARENT QUESTIONNAIRE\*

### Directions to parents:

This questionnaire will give the Hart County school district information about how you as a parent feel about the school your child attends and about your role in the school.

If you have children at two schools, you may get two questionnaires. Please write the name of the school to which this information applies on the line below:

For each question, please decide if you Agree or Disagree that the statement applies to your child's school. Then circle the number that comes closest to expressing your opinion:

- 1 = Strongly Disagree  
2 = Disagree  
3 = Not Sure  
4 = Agree  
5 = Strongly Agree

- |                                                                                                                                                                           |   |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1. Teachers in this school use either phone calls, newsletters, regular notes or parent conferences in addition to report cards to communicate my child's progress to me. | 1 | 2 | 3 | 4 | 5 |
| 2. Parents learn from the teachers specific ways to help their children with their homework.                                                                              | 1 | 2 | 3 | 4 | 5 |
| 3. The school's teachers and principals are open to parents' suggestions and involvement.                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 4. I know parents who have volunteered their time for activities in the schools.                                                                                          | 1 | 2 | 3 | 4 | 5 |
| 5. Teachers do not contact parents regularly to discuss student progress.                                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 6. The school staff do not send parents booklets or pamphlets on school information, discipline, nutrition, or health care.                                               | 1 | 2 | 3 | 4 | 5 |
| 7. Most of the teachers communicate frequently with parents.                                                                                                              | 1 | 2 | 3 | 4 | 5 |
| 8. Parents are not encouraged to visit their children's classrooms or schools.                                                                                            | 1 | 2 | 3 | 4 | 5 |
| 9. There is an active parent/school group.                                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 10. The school does not offer to parents classes about child growth and development.                                                                                      | 1 | 2 | 3 | 4 | 5 |
| 11. Teachers seek ideas and suggestions from parents.                                                                                                                     | 1 | 2 | 3 | 4 | 5 |
| 12. The teachers or principal inform parents about what students need in order to study effectively at home.                                                              | 1 | 2 | 3 | 4 | 5 |
| 13. I know very little about the policies, academic programs, and activities of the school.                                                                               | 1 | 2 | 3 | 4 | 5 |
| 14. I believe that my child's teachers care about what my child's home life is like.                                                                                      | 1 | 2 | 3 | 4 | 5 |

1 = Strongly Disagree  
 2 = Disagree  
 3 = Not Sure  
 4 = Agree  
 5 = Strongly Agree

15. In general, the staff is frank and open with parents and students	1	2	3	4	5
16. The school staff help parents to be aware of family services that are available from other agencies (for example, Health Department, ASCS, or the Department of Human Services).	1	2	3	4	5
17. It is difficult for parents to contribute to decisions made at this school.	1	2	3	4	5
18. Parents are aware that teachers are willing to help their children with specific needs or concerns.	1	2	3	4	5
19. It is easy to make appointments to meet with teachers.	1	2	3	4	5
20. Teachers do not encourage parents to help their children make the most of their years in school.	1	2	3	4	5
21. Very few parents visit the school	1	2	3	4	5
22. I know parents who have supported the teachers concerning the school behavior of their children.	1	2	3	4	5
23. The principal leads frequent discussions about instruction and achievement with parents.	1	2	3	4	5
24. Parents are not encouraged by the school staff to read to their children at home, or to show an interest in their children's reading.	1	2	3	4	5
25. It is difficult to make appointments with the principal to discuss instructional issues.	1	2	3	4	5
26. Parents who need help in feeding and clothing their children can get help or useful information from the school.	1	2	3	4	5
27. The principal brings instructional issues (such as improving teaching) to parents for discussion.	1	2	3	4	5
28. Parents show that they have high expectations for their children.	1	2	3	4	5
29. The principal communicates the mission of the school to parents	1	2	3	4	5
30. Teachers send classwork home for me to look at.	1	2	3	4	5

**THANK YOU FOR YOUR COOPERATION WITH THIS SURVEY.**

## AEL's Level of Parent Involvement Questionnaire\*

**Directions to parents:** This questionnaire will give your school district information about how you as a parent feel about the school your child attends and about your role in the school.

If you have children at two schools, you may get two questionnaires. Please write the name of the school to which this information applies on the line below:

For each question, please decide if you agree or disagree that the statement applies to your child's school. Then circle the number that comes closest to expressing your opinion:

- 1 = Strongly Disagree  
2 = Disagree  
3 = Not Sure  
4 = Agree  
5 = Strongly Agree

- |                                                                                                                                                                            |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1. Teachers in this school use either phone calls, newsletters, regular notes, or parent conferences in addition to report cards to communicate my child's progress to me. | 1 | 2 | 3 | 4 | 5 |
| 2. Parents learn from the teachers specific ways to help their children with their homework.                                                                               | 1 | 2 | 3 | 4 | 5 |
| 3. The school's teachers and principals are open to parents' suggestions and involvement.                                                                                  | 1 | 2 | 3 | 4 | 5 |
| 4. Someone from my family has volunteered time or money to the school during the last twelve months..                                                                      | 1 | 2 | 3 | 4 | 5 |
| 5. Teachers do not contact parents regularly to discuss student progress.                                                                                                  | 1 | 2 | 3 | 4 | 5 |
| 6. The school staff do not send parents booklets about nutrition, health care, or raising children.                                                                        | 1 | 2 | 3 | 4 | 5 |
| 7. Most of the teachers communicate frequently with parents.                                                                                                               | 1 | 2 | 3 | 4 | 5 |
| 8. I feel welcome when I visit my child's school.                                                                                                                          | 1 | 2 | 3 | 4 | 5 |
| 9. I have visited my child's school at least twice in the past year.                                                                                                       | 1 | 2 | 3 | 4 | 5 |
| 10. There is an active parent/school group.                                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 11. The school does not offer to parents classes about child growth and development.                                                                                       | 1 | 2 | 3 | 4 | 5 |
| 12. Teachers seek ideas and suggestions from parents.                                                                                                                      | 1 | 2 | 3 | 4 | 5 |
| 13. The teachers or principal inform parents about what students need in order to study effectively at home.                                                               | 1 | 2 | 3 | 4 | 5 |

- |                                                                                                                                                                                      |   |   |   |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 14. I believe that my child's teachers care about what my child's home life is like.                                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 15. In general, the staff is frank and open with parents and students                                                                                                                | 1 | 2 | 3 | 4 | 5 |
| 16. The school staff help parents to be aware of family services that are available from other agencies (for example, Health Department, ASCS, or the Department of Human Services). | 1 | 2 | 3 | 4 | 5 |
| 17. It is difficult for parents to contribute to decisions made at this school.                                                                                                      | 1 | 2 | 3 | 4 | 5 |
| 18. Parents are aware that teachers are willing to help their children with specific needs or concerns.                                                                              | 1 | 2 | 3 | 4 | 5 |
| 19. It is easy to make appointments to meet with teachers.                                                                                                                           | 1 | 2 | 3 | 4 | 5 |
| 20. Teachers do not encourage parents to help their children make the most of their years in school.                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 21. Very few parents visit the school.                                                                                                                                               | 1 | 2 | 3 | 4 | 5 |
| 22. If my child got into trouble at school, I think that the school staff would do the right thing in dealing with the problem                                                       | 1 | 2 | 3 | 4 | 5 |
| 23. The principal leads frequent discussions about instruction and achievement with parents.                                                                                         | 1 | 2 | 3 | 4 | 5 |
| 24. Parents are not encouraged by the school staff to read to their children at home, or to show an interest in their children's reading.                                            | 1 | 2 | 3 | 4 | 5 |
| 25. It is difficult to make appointments with the principal to discuss instructional issues.                                                                                         | 1 | 2 | 3 | 4 | 5 |
| 26. Parents who need help in feeding and clothing their children can get help or useful information from the school.                                                                 | 1 | 2 | 3 | 4 | 5 |
| 27. The principal brings instructional issues (such as improving teaching) to parents for discussion.                                                                                | 1 | 2 | 3 | 4 | 5 |
| 28. I expect my child to earn grades of C or better, and I make sure my child knows that is what I expect.                                                                           | 1 | 2 | 3 | 4 | 5 |
| 29. The principal communicates the mission of the school to parents.                                                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 30. Teachers send classwork home for me to look at.                                                                                                                                  | 1 | 2 | 3 | 4 | 5 |

**THANK YOU FOR YOUR  
COOPERATION WITH THIS  
SURVEY.**